

CLAIMS

What is claimed is:

1. An axle assembly comprising:
an axle housing;
a pump housing attachable to cover an opening within said axle housing;
a pump mounted within said pump housing; and
an input shaft supported by said pump housing and driving said pump.
2. The assembly as recited in claim 1, wherein said pump supplies lubricant from a sump within said axle housing to a driveline component supported within said axle housing.
3. The assembly as recited in claim 2, comprising an annular passage defined within said pump housing surrounding said input shaft.
4. The assembly as recited in claim 2, wherein said input shaft comprises a lubricant passageway receiving lubricant from said pump.
5. The assembly as recited in claim 4, wherein said lubricant passageway comprises at least one outlet passage for distributing lubricant.

6. The assembly as recited in claim 1, comprising a bearing supporting rotation of said input shaft mounted within said pump housing.
7. The assembly as recited in claim 1, wherein said pump housing comprises a filter housing for attachment of a lubricant filter.
8. The assembly as recited in claim 1, wherein said pump housing comprises a relief valve for controlling lubricant pressure emitted from said pump.
9. The assembly as recited in claim 1, where in said pump comprises a rotor pump.
10. The assembly as recited in claim 9, wherein said rotor pump comprises a reversing ring for directing oil flow in a first direction regardless of input shaft rotational direction.
11. The assembly as recited in claim 1, wherein said pump housing comprises a bearing cage supporting rotation of said input shaft.

12. A pump housing assembly attachable to an axle housing comprising;
a pump housing covering an opening within the axle housing; and
a pump mounted within said pump housing. /
13. The assembly as recited in claim 12, comprising a bearing cage for supporting rotation of an input shaft.
14. The assembly as recited in claim 12, comprising a relieve valve for controlling pressure output from said pump.
15. The assembly as recited in claim 12, wherein said pump comprises a rotor pump.

16. An axle lubrication kit installable to an axle housing comprising:
an input shaft comprising a passage for lubricant; and
a pump housing attachable to the axle housing for covering an opening, said pump housing comprising a pump driven by said input shaft.
17. The kit as recited in claim 16, wherein said pump housing includes a bearing supporting rotation of said input shaft.
18. The kit as recited in claim 17, wherein said pump housing defines a lubricant inlet passage for communicating with a sump, and an outlet in communication with said passage for lubricant within said input shaft.
19. The kit as recited in claim 17, wherein said pump housing further includes a relief valve for controlling pressure within said pump.
20. The kit as recited in claim 17, wherein said pump comprises a rotor pump.
21. The kit as recited in claim 17, wherein said pump comprises a gear pump.